



Natural Heritage & Endangered Species Program

Natural Heritage & Endangered
Species Program
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MASSACHUSETTS RARE AND ENDANGERED PLANTS

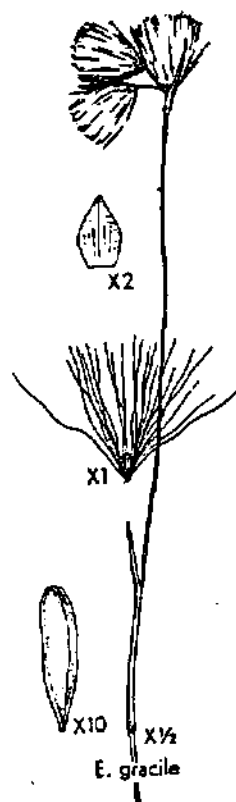
SLENDER COTTONGRASS

(*Eriophorum gracile* W. D. J. Koch ex Roth)

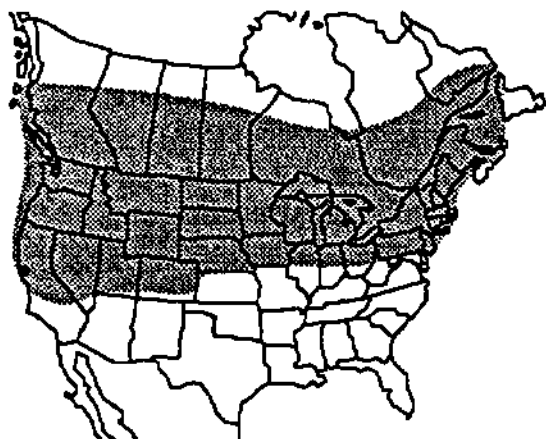
Description

Slender Cottongrass--a narrow-stemmed, grass-like perennial in the Sedge family (Cyperaceae)--is topped by a cluster of white, bristly inflorescences that resemble tufts of wool when seen from a distance. In fact, the genus name comes from the Greek words *erion* and *phorus*, meaning "wool" and "bearing" respectively. The weak, unbranched, 2-6 dm (8 - 24 in.) long stems are roughly circular in cross-section and rise from a creeping rhizome (underground horizontal stem).

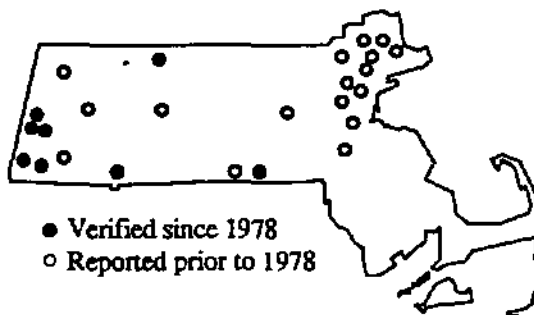
Slender Cottongrass's narrow blades are 1-2 mm (1/25 - 2/25 in.) wide, and the uppermost is shorter than its sheath (the lower portion of a leaf that envelops the stem). There is one erect, foliaceous bract (modified leaf associated with an inflorescence), which is shorter than the inflorescence



Gleason, H.A. The New
Britton and Brown Illustrated
Flora of the US & Adjacent
Canada. NY Botanical Garden,
1952.



Documented Range of Slender
Cottongrass



Massachusetts Distribution by Town

and, usually, blackish at its base. Cotton-grass's wooly inflorescences occur as 2-5 spikelets (arrangements of reduced, stalkless flowers and bracts on an unbranched axis). Bristles are fully developed from early June to early July. The three-sided achenes (dry, one-seeded fruits) are brown and 2.5-3.5 mm (3/25 - 4/25 in.) long.

Range

The documented range of Slender Cottongrass in North America extends from Newfoundland to British Columbia, south to Pennsylvania, Indiana, Iowa, Colorado and California.

Similar Species

Plants that may be mistaken for Slender Cottongrass include various other species of *Eriophorum*. Rough Cottongrass (*E. tenellum*) can be distinguished by its uppermost leaf, the blade of which equals or exceeds its sheath in length. Both Virginia Cottongrass (*E. virginicum*) and Thin-leaved Cottongrass (*E. viridi-carinatum*) have two or three foliaceous bracts, in contrast to the one of Slender Cottongrass. Finally, Close-sheathed Cottongrass (*E. vaginatum*) has only one spikelet and no foliaceous bracts.

Habitats in Massachusetts

Slender Cottongrass is a plant of swamps and bogs. Habitats in Massachusetts include an acidic bog with no inflow or outflow, an alkaline fen (a peat-forming habitat where very cold, nutrient-poor water seeps through limey gravel to the surface) kept open by annual mowing, the open outlet channel of a freshwater lake, an abandoned beaver's pond dam, a wet fen near a streamlet, a shrubby section of a cedar swamp, and a wet basin with seepage swamp. Associated species include Shrubby Cinquefoil (*Potentilla fruticosa*), Leather-leaf (*Chamaedaphne calyculata*), Horsetail (*Equisetum fluviatile*), Sphagnum Moss, and various species of *Carex* (in the Sedge family). Rare Massachusetts plants that have been found with Slender Cottongrass include Fen Sedge (*Carex tetanica*) and Hoary Willow (*S. candida*).

Population Status

Slender Cottongrass is presently listed as "Threatened" in Massachusetts. There are nine current stations in eight towns (discovered or relocated since 1978) and nineteen historical stations (unverified since 1978) in eighteen towns. (One historical and one current station occur in one town and are represented by a single, solid dot on the town distribution map.) It is also considered rare in Vermont, Rhode Island, Indiana, Iowa, Nebraska, North Dakota, South Dakota, Wyoming and Colorado. Slender Cottongrass was present historically in Delaware, New Jersey and Ohio.